

# The Triennial Review Preliminary Draft

October 6, 2005  
Phoenix, Arizona

## Purposes

Three main purposes today:

- To present the preliminary draft rules.
  - What's changed from the kickoff meetings?
  - What's new?
- To discuss stakeholder comments received so far.
- To discuss the stakeholder process and schedule for rule development.

## What's Changed Since the Kickoff Meetings?

- At the kickoff meetings, ADEQ presented the idea of consolidating the human health designated uses (FBC, PBC, FC and DWS) into a single HH designated use.
- ADEQ has reconsidered this idea. The preliminary draft retains the FBC, PBC, FC, and DWS designated uses.

## What's Changed Since the Kickoff Meetings?

- At the kickoff, ADEQ was considering the proposal of a less stringent chronic selenium criterion (2 µg/L to 5 µg/L)
- ADEQ is reconsidering after receiving comments from EPA & U.S. Fish & Wildlife Service. ADEQ retained 2 µg/L in the preliminary draft.



### What's New Since the Release of the Preliminary Draft?

- Draft antidegradation rule (currently being reviewed by upper management)
- A revised narrative nutrient implementation rule (Also under management review).
- ADEQ is considering a new suspended sediment concentration criterion to protect trout species from chronic exposures to suspended sediment (A&Wc at 25 mg/L; A&Ww at 80 mg/L)

### Some Common Ground Retention of 4 Subcategories of Aquatic Life Designated Use

- Comment: Expressions of support for the retention of the four subcategories of the aquatic life designated use (ALc, ALw, ALedw and ALe)
  - ADEQ retained the current AL subcategories in the preliminary draft.

### Some Common Ground Chlorine Criteria to Protect Aquatic Life

- Comment: ADEQ should modify the total residual chlorine criteria to protect aquatic life in EDWs.
- ADEQ will propose adoption of total residual chlorine standards that are consistent with EPA national criteria recommendations.
  - Acute: 11 µg/L to 19 µg /L
  - Chronic: 5 µg/L to 11 µg/L



### Some Common Ground Fish Tissue Criteria

- Comment: Fish tissue criteria for the fish consumption designated use should replace water column criteria.
- ADEQ agrees. See "FT" abbreviation in Appendix A of preliminary draft (*See also* p. 61).

### Some Common Ground Fish Tissue Criteria for Mercury

- Comment: ADEQ should adopt fish tissue criteria for methyl mercury that do not cause a significant risk to human health. ADEQ should adopt EPA's methyl mercury fish tissue criterion.
- ADEQ agrees and is proposing EPA's methyl mercury fish tissue criterion of 0.3 mg/kg to protect human health.

### Some Common Ground No Change to ALe Criteria

- Concern: We disagree with any reconsideration of the technical basis or changes to the methodology for developing ALe criteria.
- ADEQ retained the current ALe (acute) criteria without change in this triennial review.

### Some Common Ground Narrative Standard IPs in Rule

- Comment: ADEQ should develop implementation procedures for the narrative toxics standard, narrative bottom deposits and narrative nutrient standard in rules.
- 2 out of 3 are in the preliminary draft (bottom deposits, narrative nutrients).
- Narrative toxics will have to be addressed in a separate stakeholder process.
- ADEQ will go forward with antidegradation IP rule and biocriteria.

### Revision of R18-11-104 Affirming Designated Uses

- Comment: ADEQ should create a procedure for affirming designated uses based on analyses of in-stream conditions. There should be a mechanism by which the Director can affirm that a designated use is attained based on the direct measurement of in-stream parameters defining the designated use rather than presuming the use is not attained on the basis of surrogate metrics (e.g., numeric standards WET tests).

## Designated Uses

- Comment: ADEQ should create a mechanism which allows persons to petition ADEQ to add designated uses or subcategories of designated uses.

## Site-Specific Standards

- Comment: ADEQ should adopt a rule setting out the acceptable processes for establishing site-specific standards.
  - ADEQ agrees in principle and supports development of a rule for establishing site-specific aquatic life criteria reflecting local environmental conditions.
  - Must be based on a sound scientific rationale.
  - Must be consistent with EPA guidance on development of site-specific standards.

## Site-Specific Standards

- At a minimum, the rule would include the following procedures:
  - Recalculation Procedure
  - Water-Effects Ratio Procedure
  - Resident Species Procedure
  - Site-specific standards based on natural background

## SSC Criteria

- Comment: We cannot review or comment on suspended sediment concentration criteria because ADEQ has not revealed how it will determine a revised standard or what the standard will be.
  - Chronic SSC criterion incorporated into Appendix A for ALc and ALw (80 mg/L).
  - ADEQ is considering a more stringent ALc (chronic) criterion of 25 mg/L to protect trout species .

### Limits on turbidity-causing discharges

- Comment: Many concerns regarding how this standard will be developed and its applicability. Will it apply only to perennial streams? During storm events?
  - Upstream / downstream limit on discharge
  - Applies to all streams, not just perennial streams
  - Applies at all flow regimes, including storm events.

### Aquatic Life (Chronic) Criteria for Mercury

- Comment: ADEQ should adopt EPA's recommended national criterion for mercury (II) in water of 0.77 ppb to protect aquatic life from mercury toxicity.
  - ADEQ retained its current AL (chronic) criterion for mercury (0.01 µg/L) in the preliminary draft.
  - EPA and U.S. Fish & Wildlife comments

### EPA's Recommended Criterion for Mercury

- "This recommended water quality criterion was derived from data for inorganic mercury (II), but is applied here to total mercury. If a substantial portion of the mercury in the water column is methylmercury, this criterion will probably be under protective. In addition, even though inorganic mercury is converted to methylmercury and methylmercury bioaccumulates to a great extent, *this criterion does not account for uptake via the food chain because sufficient data were not available when the criterion was derived.*"

(Footnote from EPA National Criteria Recommendations)

### New EDWs

- Comment: Concern was expressed over new EDW listings. ADEQ should conduct an independent analysis for each one to ensure that it fits the regulatory definition of EDW. ADEQ should explain in detail how it plans to identify and list all EDWs.
  - ADEQ listed each new EDW in App. B & C.
  - Each new EDW was identified by AZPDES permit staff as a point source discharge of treated wastewater to an ephemeral water.

### R18-11-113(E)

- The current and the preliminary draft rule both state:

The NPDES permit issuing authority shall use the water quality standards that apply to an effluent dependent water to derive discharge limitations for a point source discharge from a wastewater treatment plant to an ephemeral water that changes that ephemeral water into an effluent dependent water.

### R18-11-113(E)

- Comment: ADEQ should repeal R18-11-113(E) for the following reasons:

- R18-11-113(E) conflicts with R18-11-113(A) which states that the Director shall classify a surface water as an EDW by rule.
- The mere discharge of wastewater cannot change an ephemeral water into an effluent dependent water.

### Definition of “Effluent Dependent Water”

Comment: ADEQ should revise the definition of “effluent dependent water” to say that an EDW is a surface water that consists of treated wastewater that is classified as an EDW by the Director under R18-11-113(A). As part of the classification process, ADEQ must conduct a scientific study, utilize available site-specific research and data, or develop an implementation policy that identifies general criteria necessary to determine if discharge conditions are adequate to create an EDW and ecosystem.

### Definition of Ephemeral Water

- Comment: The definition of “ephemeral water” should be changed to allow the possibility of an ephemeral water to receive intermittent discharges of treated wastewater while still maintaining its ephemeral use designation.

## Storm Water Discharges and Ephemeral Waters

- Comment: ADEQ should recognize the limited application of surface water quality standards to storm water discharges and ephemeral waters.
  - ADEQ has developed A&We (acute only) criteria that apply to ephemeral waters
  - Storm water discharges regulated under the AZPDES permit program are required to comply with applicable WQS.

## R18-11-120(C)

- Comment: ADEQ should amend R18-11-120(C) to clarify that it applies to enforcement and assessment. ADEQ also should add a frequency element stating that acute and chronic criteria shall not be exceeded more than once in three years.
  - Assessment, including a frequency element, is appropriately addressed in the Impaired Waters Rule.

## New Narrative Biocriterion

- Comment: ADEQ should carefully review and consider Dr. Parkhurst's comments on the proposed narrative biocriterion.
  - ADEQ considered Dr. Parkhurst's comments and drafted a written response.
  - ADEQ revised the biocriteria IP document to address some of the issues.

## Process

- Comment: ADEQ should extend the schedule for completing the triennial review.
- ADEQ will take the time necessary to ensure adequate public participation in the development of revised WQS. Original schedule called for the completion of a Notice of Proposed Rulemaking in November, 2005. This target date will be extended to the end of the year.

## Process

- Comment: Use a separate stakeholder process to develop new rules for each narrative standard.
- ADEQ will address as many of the narratives as possible through the triennial review process, but ADEQ will probably need to develop the IPs for the narrative toxics standard separately.

## Revised Schedule

- Written comments on preliminary draft:  
November 4, 2005.
- Notice of Proposed Rulemaking:  
By December 31, 2005
- Is there a need for additional stakeholder meetings on specific WQS issues?



## Your Comments and Issues

